



icmr | **VCRC**
INDIAN COUNCIL OF
MEDICAL RESEARCH | VECTOR CONTROL
RESEARCH CENTRE

M.SC. PUBLIC HEALTH ENTOMOLOGY

Affiliated with Pondicherry University

(A Central University)



PROSPECTUS
2026-2028



M.Sc. Public Health Entomology
2 Year Course
 (Fulltime Semester Pattern)

ICMR-Vector Control Research Centre (VCRC), established at Pondicherry (now Puducherry) in July 1975, is one of the permanent institutes of the Indian Council of Medical Research, Department of Health Research, Government of India. ICMR-VCRC has been engaged in basic and applied research with the primary objective of finding newer methods and developing strategies of vector control for the control of vector borne diseases.



A Master’s degree programme in Public Health Entomology (M.Sc., PHE) was introduced in 2011 by our Centre under the affiliation of Pondicherry University, Puducherry by ICMR-Vector Control Research Centre (VCRC), Department of Health Research, Government of India, Puducherry.

Scope of the Course

There is a growing need for entomologists in the field of Public Health in view of emerging and re-emerging vector-borne diseases in India and other tropical countries. Apart from the State Health Departments, National Centre for Vector-Borne Diseases Control (NCVBDC), National Centre for Disease Control (NCDC), National Health Mission (NHM), and Indian Council of Medical Research (ICMR) require personnel with knowledge and expertise on entomology, epidemiology and prevention/control of vector-borne diseases for their programmes.

Course Description

This is an unique course in India catering to national as well as global needs. The course provides an opportunity for students to gain in-depth knowledge of Public Health Entomology and intense training on the modern approaches for epidemiology, control of vectors and prevention vector-borne diseases.

The course focuses on vectors of local as well as global importance. An epidemiological perspective is integrated throughout the course. Biology, ecology, environment, surveillance and application of modern tools in the management of vectors and vector-borne diseases are dealt with in detail.

Learning Objectives

By the end of this course, students will be able to:

- (i) define the basics of arthropods of public health importance
- (ii) recognize vector - host - pathogen relationships in arthropod-borne diseases
- (iii) conduct epidemic/outbreak investigation of vector-borne diseases
- (iv) apply modern tools for surveillance and diagnosis of vector-borne diseases
- (v) design appropriate prevention and control measures including rationalization of the use of insecticides in Public Health Programmes
- (vi) promote Integrated Vector Management

Duration of the Course

The duration of the course is TWO academic years (4 Semesters, Full time).

Medium of Instruction

English will be the medium of instruction for all subjects of study and examinations of the Course.

Admission Procedure

Admission to the above course shall be made by following the admission related procedures prescribed by the Pondicherry University from time to time.

No. of Seats provisionally allocated: 20

Among the total seats, 18 will be filled in through competitive examination (Category-I) and 2 shall be for candidates from Central & State Health Departments, India (In-Service; Category-II). When sufficient numbers of candidates are not available under a Category-II, the Admission Committee constituted for this purpose will fill the vacant seats by Category-I candidates.

Eligibility for Admission

Candidates who have obtained a Bachelor's degree in Biological Sciences (Biology/Agriculture/Biotechnology/Microbiology/Life Science) with Zoology as a major or allied subject or Entomology as one of the Subjects from a University recognized by the Pondicherry University, Puducherry.

Candidates appearing for the Under-Graduate final examinations/waiting for the results of the above courses can also apply. However, they should submit the Provisional Certificate at the time of admission.

A minimum of 55% mark in core and allied subject excluding language is essential for candidates belonging to General/EWS (Economically Weaker Section) and a relaxation of 5% of marks, from 55% to 50%, or an equivalent relaxation of grade is allowed for those belonging to OBC-NCL (Other Backward Classes - Non-Creamy Layer)/SC (Scheduled Caste)/ST (Scheduled Tribe).

Reservation

The rule of reservation set in force by the Government of India and Pondicherry University, Puducherry shall apply from time to time while allocating seats during admission.

Method of Selection**Category-I****Common Entrance Test****Syllabus:**

Syllabus for Common Entrance Test covers science subjects (Biology/Agriculture/Biotechnology/Microbiology/Zoology/Life Science). The multiple-choice questions from the above subjects shall be at the Undergraduate level.

Pattern of exam:

A common entrance test (CET) will be held only in Puducherry. The duration for the CET will be for two hours. There will be 100 multiple choice questions, each carrying one mark. Minimum qualifying mark for shortlisting is 50% in CET.

Selection of candidates:

- Selection of the candidates will be based on the performance in the Common Entrance Test [CET].
- Overall Merit list and Selection list for admission will be published in the websites of ICMR-VCRC: <https://vcrc.icmr.org.in/> and ICMR: <https://www.icmr.gov.in/>

Category-II

In-service Candidates

- In-service candidates with age 45 or below employed in Centre or State Health Department should have passed the Degree examination in any of the above mentioned disciplines from a University recognized by the Pondicherry University, Puducherry.
- The candidates should send their application with a "**No Objection Certificate**" and "**Certificate of Sponsorship**" with approved study leave with salary from their Employer/Institution.
- Selection of the candidates will be based on the qualification, experience and performance during oral interview conducted by the Admission Committee.

Registration with Pondicherry University

A candidate admitted into the M.Sc. Public Health Entomology Course shall submit the prescribed application form for registration duly filled in along with prescribed fee and declaration in the format, to the Academic Officer of this University through the affiliated institution within 60 days from the cut-off date prescribed for admission.

Stipend

Candidates selected through CET (Category-I) will be paid a sum of Rs. 10,000/- per month as stipend. No stipend will be paid to Category-II (In-Service/Sponsored) candidate.

Course Structure

The M.Sc. Programme is divided into two parts. Each part consists of two Semesters.

CREDIT HOURS ALLOTTED TO DIFFERENT PAPERS INCLUDING DISSERTATION

Semester	Subject Code	Subject	Hours		
			Theory	Practical	Credit hours
I	MPHET 101	Biology & Ecology of Arthropods of Public Health Importance	65		4
	MPHET 102	Morphology, Taxonomy and Bio-diversity of Vectors	65		4
	MPHET 103	Physiology and Bio-chemistry of Insects of Public Health Importance	65		4
	MPHET 104	Environment and Public Health	65		4
	MPHEP 105	Practical – 1: Biology & Ecology of Arthropods of Public Health Importance		30	1
	MPHEP 106	Practical – 2: Morphology, Taxonomy and Bio-diversity of Vectors		30	1
	MPHEP 107	Practical – 3: Physiology and Bio-chemistry of Insects of Public Health Importance		30	1
	MPHEP 108	Practical – 4: Environment and Public Health		30	1
II	MPHET 201	Vector-Borne Parasites and Pathogens of Public Health Importance	65		4
	MPHET 202	Application of Molecular Biology, Immunology and Bioinformatics in Public Health Entomology	65		4
	MPHET 203	Epidemiology of Vector-borne Diseases	65		4
	MPHET 204	Biostatistics	65		4
	MPHEP 205	Practical – 1: Vector-Borne Parasites and Pathogens of Public Health Importance		30	1
	MPHEP 206	Practical – 2: Application of Molecular Biology, Immunology and Bioinformatics in Public Health Entomology		30	1
	MPHEP 207	Practical – 3: Epidemiology of Vector-borne Diseases		30	1
	MPHEP 208	Practical – 4: Biostatistics		30	1
III	MPHET 301	Pesticides used in Public Health	65		4
	MPHET 302	Control of Vectors of Public Health Importance	65		4
	MPHET 303	Integrated Vector Management	65		4
	MPHET 304	Vector Borne Diseases Control Programmes	65		4
	MPHEP 305	Practical – 1: Pesticides used in Public Health		30	1
	MPHEP 306	Practical – 2: Control of Vectors of Public Health Importance		30	1
	MPHEP 307	Practical – 3: Integrated Vector Management		30	1
	MPHEP 308	Practical – 4: Vector Borne Diseases Control Programmes		30	1
IV	MPHERM 401	Research Methodology	65		4
	MPHED 402	Dissertation and Viva-voce		200	20
	MPHEFT 403	Field Training			2
Total			845	560	86

Field Training

- During the course period, students will be visiting various ICMR Institutes, Field Stations, National Centre for Vector-Borne Diseases Control and other National laboratories for observational training in the R&D activities and hands on training in the operational aspects of vector borne disease control.
- At the completion of field visits, the students are required to submit a report and make a presentation of their field training.

Dissertation

All the students must undertake dissertation work at the final semester (IV semester). Each student is individually placed under a faculty at their respective Institutes to work on the dissertation.

Attendance required for appearing for examination

No student who has less than 80% attendance in any course shall be permitted to attend the end-semester examination and he/she shall be given FA grade—failure due to lack of attendance. He/she shall be required to repeat that course.

SCHEME OF EXAMINATION

Semester	Subject Code	Subject	Theory				Total Max.
			IA Min	IA Max	UE Min	UE Max	
I	MPHET 101	Biology & Ecology of Arthropods of Public Health Importance	25	50	50	100	150
	MPHET 102	Morphology, Taxonomy and Bio-diversity of Vectors	25	50	50	100	150
	MPHET 103	Physiology and Bio-chemistry of Insects of Public Health Importance	25	50	50	100	150
	MPHET 104	Environment and Public Health	25	50	50	100	150
	MPHEP 105	Practical – 1: Biology & Ecology of Arthropods of Public Health Importance			25	50	50
	MPHEP 106	Practical – 2: Morphology, Taxonomy and Bio-diversity of Vectors			25	50	50
	MPHEP 107	Practical – 3: Physiology and Bio-chemistry of Insects of Public Health Importance			25	50	50
	MPHEP 108	Practical – 4: Environment and Public Health			25	50	50
II	MPHET 201	Vector-Borne Parasites and Pathogens of Public Health Importance	25	50	50	100	150
	MPHET 202	Application of Molecular Biology, Immunology and Bioinformatics in Public Health Entomology	25	50	50	100	150
	MPHET 203	Epidemiology of Vector-borne Diseases	25	50	50	100	150
	MPHET 204	Biostatistics	25	50	50	100	150
	MPHEP 205	Practical – 1: Vector-Borne Parasites and Pathogens of Public Health Importance			25	50	50
	MPHEP 206	Practical – 2: Application of Molecular Biology, Immunology and Bioinformatics in Public Health Entomology			25	50	50
	MPHEP 207	Practical – 3: Epidemiology of Vector-borne Diseases			25	50	50
	MPHEP 208	Practical – 4: Biostatistics			25	50	50
III	MPHET 301	Pesticides used in Public Health	25	50	50	100	150
	MPHET 302	Control of Vectors of Public Health Importance	25	50	50	100	150
	MPHET 303	Integrated Vector Management	25	50	50	100	150
	MPHET 304	Vector Borne Diseases Control Programmes	25	50	50	100	150
	MPHEP 305	Practical – 1: Pesticides used in Public Health			25	50	50
	MPHEP 306	Practical – 2: Control of Vectors of Public Health Importance			25	50	50
	MPHEP 307	Practical – 3: Integrated Vector Management			25	50	50
	MPHEP 308	Practical – 4: Vector Borne Diseases Control Programmes			25	50	50
IV	MPHERM 401	Research Methodology			50	100	100
	MPHED 402	Dissertation & Viva-voce	Dissertation		Viva-voce		200
			150		20		
	MPHEFT 403	Field Training	30				
Total							2700

UE – University Examination; IA – Internal Assessment

Examinations shall be conducted at the end of each semester as per the Academic Calendar notified by the Pondicherry University.

The system of evaluation for (i) Internal Assessment, (ii) Practical Examination, and (iii) Field Training shall be as follows:

	Marks
(i) Internal Assessment	50
(a) Assignment*	10
(b) Seminar*	10
(c) Theory Internal Examination	30
(* Any two Units of each theory paper to be chosen, one for Assignments and other for Seminar)	
(ii) Practical paper	50
Practical (40), Record (5) & Viva-voce (5)	
(iii) Field Training	30
Report (20), Presentation (10)	

Pass Percentage

Minimum marks for pass in the internal and external examination shall be 50% for all courses.

Award of the degree

Degree will be awarded based on the overall marks secured by the student as given below,

- A candidate who secures an overall average of not less than 75% shall be declared to have passed the examination in First class with Distinction, provided he/she has passed the examination in every subject in the very first appearance.
- A candidate who secures an overall average of not less than 60% within the prescribed course duration shall be declared to have passed the examination in First class.
- All other candidates shall be declared to have passed in second class.

Span Period

- Examinations for courses shall be conducted only in the respective odd and even Semesters as per the Scheme of Examinations. Regular as well as Supplementary students shall be permitted to appear/reappear in courses of Odd Semesters only at the end of Odd Semesters and courses of Even Semesters only at the end of Even Semesters respectively.
- The maximum duration to complete the programme is four years, which includes the regular two-year course period.

Academic Fees

The Academic fees indicated below is provisional, and is likely to be changed in line with the Pondicherry University guidelines and the Institutional norms, from time to time.

ACADEMIC FEES

Sl. No.	Particulars	I Year (in Rs.)	II Year (in Rs.)
1.	Tuition fee	10000	10000
2.	Registration fee	500	-
3.	Caution deposit [refundable]	5000	-
4.	Corpus Fund	500	500
5.	Library fee	500	500
6.	Wet Laboratory Fee	10000	10000
7.	Computer Lab Fee	5000	5000
8.	Alumni Fund	2000	-
9.	Field training Fee	5000	5000
10.	Academic Amenity Fee	3000	3000
11.	Sports/Recreation Fee	1000	1000
12.*	Matriculation fees for UG/PG qualified candidates (to be collected from all students except those who have qualified from Pondicherry University) *	100	-
13.*	University Fee: Recognition Fee: For UG/PG qualified students * (i) (except students qualified from Pondicherry University) (ii) For candidate qualified from outside India	500	-
14.*	Sports fee Onetime payment at the time of admission for all students) *	150	-
15.*	University Development Fund (Onetime payment at the time of admission for all students) *	100	-
	Total	43350	35000

*Subject to revision from time to time as per the University notification.

Rules for academic fees

Fee refund policy of UGC, followed by Pondicherry University shall be applicable. If, after having paid the fees, a student desires to discontinue, he/she shall be refunded all fees after deducting Rs.1000/- provided he/she discontinues on or before the date notified by the University. Caution deposit money is refundable on his/her leaving the Institute, after deducting all dues against him/her.

Hostel

Hostel facilities are available in ICMR-VCRC, Puducherry, on first-come, first-serve basis. The hostel fee is fixed by the Institute.

HOSTEL FEE

Sl. No.	Particulars	I year (in Rs.)	II year (in Rs.)
1.	Caution Deposit (Refundable)	5000	-
2.	Room Rent (p.a.)	6000	6000
3.	Establishment (p.a.) (EB & Others)	5000	5000
4.	Amenities (p.a.)	5000	5000
	Total	21000	16000

Conduct and Discipline

- Students enrolled for the course must realize their responsibilities to the Course, Faculty and the Institute. Failure to maintain appropriate standards of conduct will attract disciplinary action.
- Students should always wear the ID card provided to them and should not bring mobile phone to the class rooms.
- Ragging in any form is strictly prohibited. If any incident of ragging comes to the notice of the authority, the concerned student involved in ragging shall be given liberty to explain and if the explanation is not found satisfactory, he/she will be expelled from the Institution & Hostel.
- Alcohol, narcotic drugs, cigarettes, and other tobacco products are strictly prohibited within the premises of the Institute, and use of any of the above is an offence and punishable, leading to eviction from the course.
- Students should abide by the rules and regulations stipulated by the Institute and Pondicherry University, from time to time.
